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The DRILLER

JOHN CRERAR
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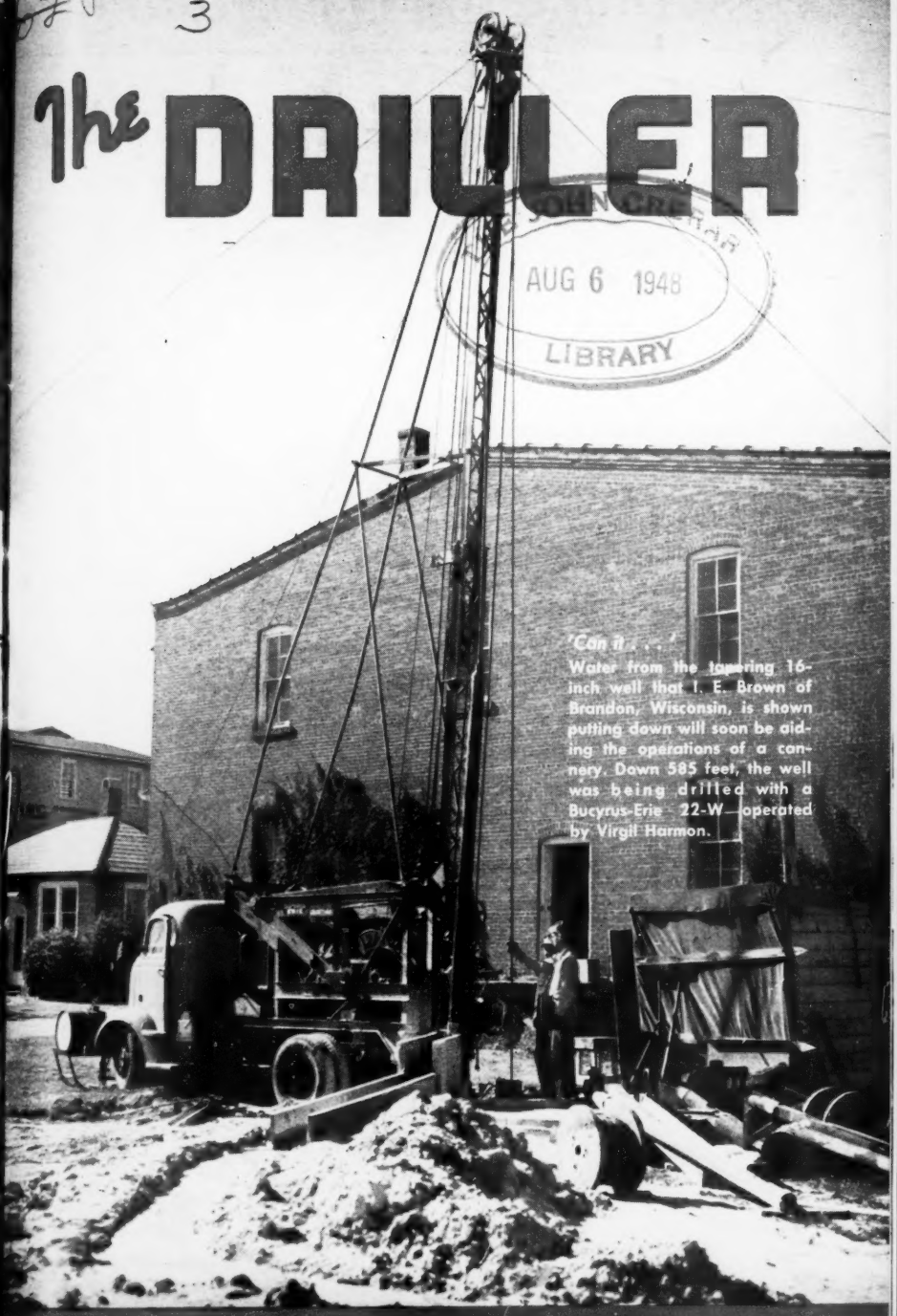

'Can it . . .'
Water from the tapering 16-inch well that I. E. Brown of Brandon, Wisconsin, is shown putting down will soon be aiding the operations of a cannery. Down 585 feet, the well was being drilled with a Bucyrus-Erie 22-W operated by Virgil Harmon.

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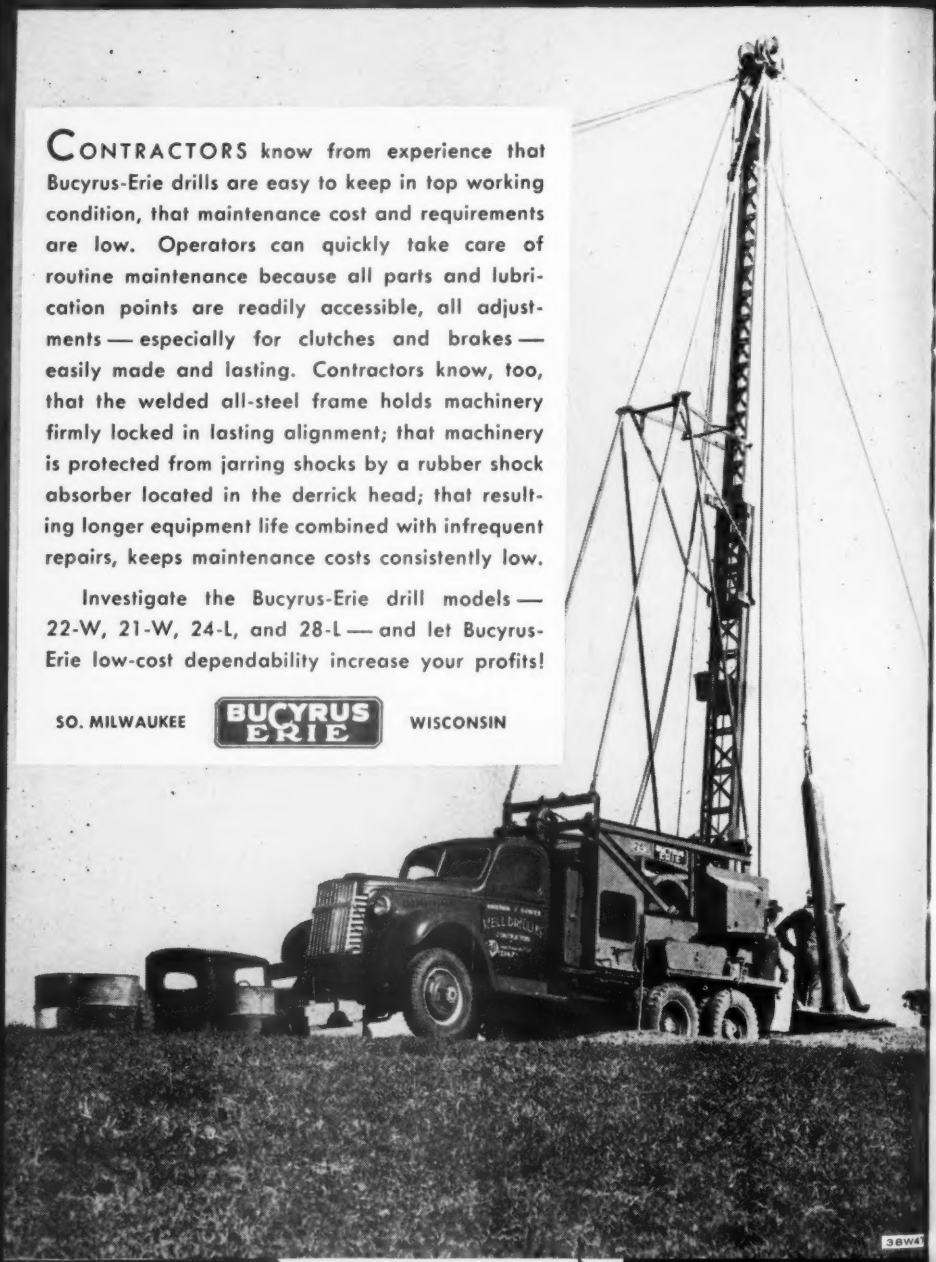
VOLUME 22 AUGUST, 1948 NUMBER 8

LESS WORK TO KEEP WORKING



CONTRACTORS know from experience that Bucyrus-Erie drills are easy to keep in top working condition, that maintenance cost and requirements are low. Operators can quickly take care of routine maintenance because all parts and lubrication points are readily accessible, all adjustments — especially for clutches and brakes — easily made and lasting. Contractors know, too, that the welded all-steel frame holds machinery firmly locked in lasting alignment; that machinery is protected from jarring shocks by a rubber shock absorber located in the derrick head; that resulting longer equipment life combined with infrequent repairs, keeps maintenance costs consistently low.

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Formed after the war by three enterprising young veterans from widely-separated states, the Aqua Drilling Company of Parkersburg, West Virginia, is making modern streamline methods of drilling pay off in success.

By L. H. HOUCK

Rapid Rolling Rigs Spark Young Firm

PEOPLE in Virginia and West Virginia are sitting up and taking notice of a new drilling company composed of three young veterans who have won much favorable comment with their modern streamlined methods of operation.

In just a little over a year and a half, the young drillers have learned a lot of helpful angles in modern high-speed drilling operations, besides putting down a record number of wells—they are well on their way to their goal of 200 wells a year. It all started some 18 months ago when the three war veterans, who although they hailed from such separated states as Oklahoma, New York, and West Virginia, discovered they had

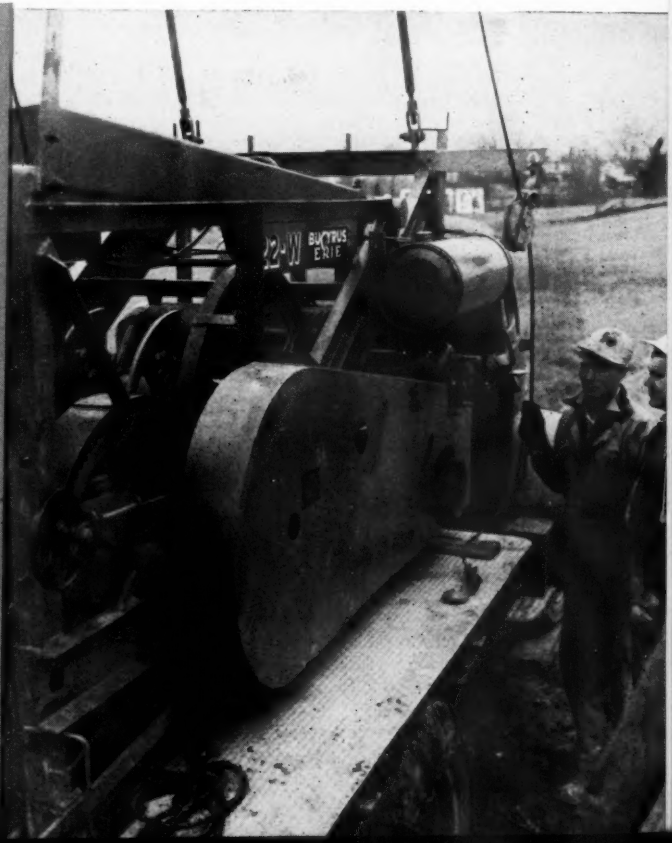
• One of the Aqua Drilling Company's 22-W's is shown on location near Mt. Sidney, Virginia, putting down a 5⅝-inch hole for a garage owner. The hole was down 50 feet when the picture was taken.

one common bond—they were all enthusiastic about the future of the water well drilling business. Formerly members of the same seismograph crew for an oil company, each possessed an experienced background in drilling operations.

The boys had already given much thought to the drilling business. They knew that rural electrification was increasing the amount of water used on farms, to say nothing of increased water needs from livestock herd increases. They knew, too, that in the territory of several states that border West Virginia, all industrial needs for water were increasing daily. New locker plants, new stores, new factories all needed more water. Even road side garages were finding themselves without adequate water supplies for car washing and radiator cleaning.

So they organized the Aqua Drilling Co. (aqua is Latin for water, of course) and decided to operate out of Parkersburg, West Virginia. The young drillers are R. N. Baker, R. D. McCollum, and F. S. Hawthorne.

After the boys staked their market out with a number of test holes, they began a study of their own job techniques in order to perfect them and bring about the fastest and most economical results. Knowing of the value of using modern equipment which makes it possible to move from job to job at regular highway speeds, they invested in modern equipment early in the game. Five months after beginning work, the drillers received their first Bucyrus-Erie 22-W. Since



• R. N. Baker and R. D. McCollum illustrate the rigging of their line which is used to quickly haul the tools onto the catwalk in road-carrying position. The line is run through a pulley on a special cross member welded to the front post.

• The catwalk extends over the rear wheels of the truck and acts as a mud guard. Made of non-slip floor plate, the walk also facilitates the greasing of the rig and the making of engine adjustments.

• McCollum mixes a little water in the hole while Baker watches. Note the I-beam framework (under the rig) used in mounting the drill on the truck.

that time they have received delivery on another Bucyrus-Erie rig and have placed their order for a third.

Their two rigs are mounted on 1948 Ford cab-over-engine trucks. These trucks have all the convenience of a modern passenger car, being equipped with cab heaters, hydraulic cushion seats, radios, and cigarette lighters. In order to facilitate traveling at high speeds over highways and easy handling on narrow mountain roads, which are often encountered in their territory, the rigs and trucks were streamlined as much as possible. Regulation truck clearance in back of the driver permits him to spend all of his time watching the road ahead and virtually eliminates all neck craning. The rigs are mounted on trucks using longitudinal I beams and 6-inch I beam cross members mounted on the truck frames. An extra 6-inch beam was welded to each cross member on the outside to support a 20-inch catwalk, 9½-feet long. This catwalk was made of a ¼-inch steel plate deck.

The catwalk on the right hand side of the rig is used to carry the drill stem and tools. These are loaded quickly and easily by means of a line running through a snatch block at the front of the rig, the line being powered by the casing reel.

This arrangement permits the rig to be prepared for the road in a matter of minutes and greatly cuts down the amount of manual labor originally necessary in moving.

(Continued on page 24)

Failure To Anchor Casing Brings Suit

A VALUABLE legal lesson for all well contractors is to be found in a decision rendered by the New Mexico Supreme Court, March 25, 1948, in the case of Andriola v. Milligan, 191 Pac. 2d 716. The court decided that the plaintiff, a landowner, was entitled to collect $3,362 in damages from the defendant, a well contractor, on the ground that a well was destroyed by the defendant's failure to anchor the casing.

The defendant undertook to deepen a 420-foot well by 100 feet, or less if water should be encountered, for $500. The written contract further provided that if sufficient water were not found within the additional 100 feet, the well should be drilled until it should be found, but not to exceed an overall depth of 700 feet, at $4 per foot. The plaintiff furnished the casing, which defendant agreed to pull at a $5 hourly charge for time required, should plaintiff decide to abandon the well.

Well Abandoned

All went well until the casing (5-inch) hung at a depth of 583 feet. Drilling was continued below that level, without the casing being anchored, until some water was found at 683 feet. At this point the casing was struck with such force that it dropped to the bottom of the hole in a telescoped and crimped condition. After efforts to drill deeper failed, the defendant abandoned the job. The plaintiff then engaged another contractor to drill a new well 225 feet from the abandoned one. At 678 feet a satisfactory flow of water was brought in. The cost of the new well was $3,825.00.

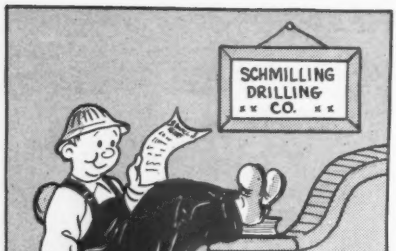
Regarding the plaintiff's suit to collect damages, the district court fixed the sum at the amount that it cost to drill the new well. This decision was appealed to the state Supreme Court which decided the defendant was at fault, but reduced the award to $3,362 on the ground that the plaintiff sought reimbursement for items aggregating $463 for which defendant was not liable.

Driller Judged At Fault

During the appeal hearing, the defendant's attorneys argued that the plaintiff was not entitled to collect damages because he did not give the defendant a chance to remedy the defects in the well. The Supreme Court replied that the defendant's own testimony showed that "when he removed his rig from the well he knew that he had left telescoped and crumbled casing in the well which he was unable to pull." The following extracts from the opinion show the high spots of the Supreme Court's reasoning:

"There is a conflict in the evidence as to whether the proper methods were used by the defendant in drilling the well and in setting the casing . . . . Regardless of any question of negligence, the defendant's inability to complete the well to a depth of 700 feet, or until sufficient water was encountered prior to reaching that depth, was due to his own operations and not to any fault of the plaintiff. Where a person is employed in a work of skill, the employer buys both his labor and his judgment; *he*

(Continued on page 17)



Profit-Loss Statement Proves Aid to Drillers

By B. L. GOUGH

WHY is it that one drilling contractor seems to make big net profit from an average-size yearly volume, while another, doing a heavy yearly volume, often winds up with a low net profit? Sometimes the answer to this question lies in the ability to use business records — specifically the profit and loss statement —as a guide in planning policies, purchases, campaigns and prices.

The profit and loss statement serves drillers who know sound business methods as a constant blueprint of operations. From a study of the latest profit and loss statment, they know what mistakes were made during the period and how to avoid these mistakes in the future. They know what was profitable, and what made it pay. They know which promotions didn't put much into the till; and, again, they know why; so that in the future, plans can be figured more efficiently and profitably.

Ordinary bookkeeping gives you a fair grasp of these factors too. But the profit and loss statement condenses your year's records into one easy-to-read page. It tells where the expense and overhead money went, and it often gives you an idea of where your expenses can be cut in the future.

How hard is it to prepare such a statement? Does a drilling contractor need special training in bookkeeping in order to do it? Does he need to call in a bookkeeper or auditor to go over his year's records and extract profit and loss statements from them as a dentist would extract a tooth?

Actually, the preparation of a year-end, a semi-annual, or a quarterly

• A profit and loss statement can be an invaluable guide in planning future business policies. Because many drilling contractors are not too familiar with the use of this statement as a business aid, the following article is presented to provide an easy-to-grasp description of the advantages of such a statement.

profit and loss statement is a simple matter. Whether you "pull a P and L statement" once a year, twice a year, or every three months, is up to you. There is no hard and fast rule of good business operation to govern this. There is only one consideration: If you compile your statement every quarter, you have fresh information constantly at your fingertips, while a once-a-year statement may grow cold before another statement is made. Many drillers have found it a good practice to make quarterly statements covering each of the three month periods, and then add these together into a year's end profit and loss compilation for income tax purposes.

Use Daily Record

Most of the information on your profit and loss statement comes from your daily record sheets, which can be kept simply in a one-book system. In addition to the information regarding credit transactions, purchases, wages, office and general overhead expenses, advertising and sales costs, transportation, cash receipts, etc. that the regular "books" give you, it is necessary to figure in the inventories and a few other items such as bad debts, that are not shown as a rule on the regular books of a well drilling company.

Depreciation is not always shown on the regular books. Yet it is an expense of your business. You should depreciate your machinery and equipment every year, basing your depreciation on the probable life of the equipment and its trade-in value when it is finally turned in for a new one.

If your profit and loss statements are "pulled" every three months, you should charge off one fourth of the annual depreciation on each quarter's statement.

Your regular books tell when credit sales have been "written off" as uncollectable. When this happens, the sums should be entered on the profit and loss statement as bad debt losses.

The essential elements of a profit and loss statement are *receipts* and *operating expenses.* The latter is subtracted from the former to arrive at a figure representing net profit or the net loss for the period.

How can this statement of profit and loss be used most effectively as a management tool in the operation of a drilling company? By a study of its various expense items, you can determine how much was spent for each of the many business expenses incurred during the period. The best way to insure that your operating costs are in line with what they should be is to compare each cost figure with the volume sales as a percentage.

Expressed In Percentage

In other words, let's say that you took in $10,000. During the period, you spent $500 for advertising. Your advertising appropriation, then, was 5% of your receipts. Depending upon your own particular circumstances, this figure was either in line, too large or too small.

By expressing each expense item in terms of a percentage of the volume, you can get a good line on how your business expenses compare with the prevailing ones in the business. If they are too high, you can take steps to lower them. If you are running under the budget, you can either pour more money into it (if you wish), or congratulate yourself on holding down the costs.

How can you secure these standard ratios against which to compare your expense figures? Chambers of commerce are fruitful sources of business statistics. The colleges of commerce of the various state universities are

(Continued on page 18)

The DRILLER

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Divert More Steel For Tubular Use Urges Angster

THAT a larger percentage of steel ingot production should go into tubular products was the contention of Herbert C. Angster, Secretary-Director, National Association of Domestic and Farm Pump Manufacturers, in an address at a recent convention of water well drillers. Angster spoke on the subject "The Steel Situation and What We Can Do About It."

Angster pointed out that the production of farm pumps and water systems has tripled since 1939 but that the productive capacity of steel mills has not increased correspondingly. Thus, essentially, Angster pointed out, the problem is the failure of the steel mills to increase their productive capacity fast enough to keep up with the expanding demands for steel pipe in the pump industry as well as many other fields.

"In 1947, the steel mills produced about 85,000,000 tons of steel ingots," Angster said. "These 85,000,000 tons were made into 63,000,000 tons of finished products, sheets, bars and tubes.

Four Per Cent Needed

"Of this total of 63,000,000 tons of finished products, about three per cent or 1,892,681 tons went into butt weld pipe. The farm pump and water system industry alone used about 700,000 tons of pipe for well work and pipe extensions.

"Essentially, our problem is that three per cent of the finished steel production is not enough for our requirements. We should have — and the importance of the water system industry in the food production picture justifies this contention — we should have at least four per cent of total steel tonnage for pipe and tubular products."

Angster cautioned that, unless the steel mills increase the percentage of finished products going into pipe and tubular goods, there is serious danger of an allocation system being set up by the government.

Well Handbook To Be Reprinted

ACCORDING to Robert P. McNeal, Service Secretary of the Missouri Water Well Drillers Association, the supply of 1,000 copies of the "Water Well Handbook" authored by Keith Anderson has been exhausted. A reprint of 500 copies has been ordered for the handbook which will be issued with a few revisions at $2 per copy.

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NEWS OF THE MONTH

Washington Group Schedules Meeting For Spokane

THE Washington State Well Drillers Association is scheduled to hold a meeting in Spokane on August 21, according to O. E. Erdman, Secretary-treasurer. This date was selected at the May 15 meeting held in the University Room of the Benjamin Franklin Hotel, Seattle.

The May 15 meeting, attended by 37 drillers and nine supply house men, was reported to be one of the liveliest meetings held by the association. Such important subjects were discussed as legislation affecting well drillers, insurance, highway and health laws, engineers and specifications, licensing of drillers, and water well heat systems.

Suggestions Aired

Many suggestions were made to bring the organization statewide and national recognition, such as the use of metal name plates to be attached to all equipment, the use of association stamp on the business stationery of each driller member, the publicizing of association activities in local papers, and the sending of the association president on a tour of the state to contact drillers.

Those speaking on the program were: Fred Roberts, Division of Hydraulics, Olympia; John Robinson, Ground Water Geologist, Tacoma; James H. Reid, Consulting Engineer with J. W. Carey & Associates, Seattle; Harry H. Sisler, Consulting Engineer, Kirkland, and E. L. Ruppert, State Dept. of Health.

Empire Drillers Hold Convention

LATE reports indicate that the program has been completed for the two-day annual convention of the Empire State Drillers' Association, scheduled to be held at the Hotel Statler, Buffalo, New York, July 14 and 15.

Arrangements were made to highlight the program with a large display of drilling equipment and associated exhibits. Scheduled to talk were F. J. Spang, Spang & Company; C. R. Cox, State Dept. of Health, and R. R. Storm, Illinois Well Drillers Association. Movies on subjects related to the industry were also on the program. The entertainment list included a night trip to Niagara Falls, a banquet, and a broadcast.

August Meeting Slated for N.C.

THE three final days in August—29, 30, and 31—have been selected as the dates for the third annual convention of the North Carolina Well Drillers' Association. The gathering will be held at the Ocean Terrace Hotel, Wrightsville Beach, N. C., according to R. O. Heater, association president.

Program plans which are rapidly being completed are expected to include both technical sessions and entertainment features. Scheduled to highlight the entertainment are surf fishing and deep-sea fishing for the men while the ladies will be favored with a boating trip down the Sound and a sightseeing trip to historic Wilmington, N. C.

Eighth Meeting Of Florida Ass'n. Held In July

THE eighth annual convention of the Florida Well Drillers' Association was held July 1, 2, and 3 at the Tampa Terrace Hotel, Tampa, Florida.

After a get-acquainted fish fry on noon of the first day, the drillers were addressed by J. Mathews of A. O. Smith Co. on "Water Lubricated vs. Oil Lubricated Turbine Pump"; Dr. H. Gunter and Dr. R. V. Vernon of the Florida Geological Survey on "Underground Formations"; L. E. Fuller of Houston, Texas, on "Screen Wells"; and I. E. Wild of Star Drilling Co. on "New Developments in Drilling Equipment."

Elected to office at the Friday morning business session were: Giles Van Duyne, Winter Haven, President; A. C. Gray, Jacksonville, First Vice-president; R. M. Vicker, Miami, Second Vice-president; Vaughn Dibble, Jr., Eustis, Secretary, and J. L. Knight, Vero Beach, Treasurer. Officers were installed at the annual banquet in the evening. More technical talks featured the remaining sessions.

Technical Sessions Feature Program Of Illinois Meet

THE twenty-first annual convention of the Illinois Water Well Drillers Association, held in conjunction with a large exposition of water well equipment supplies and service, was held at the Bradley University Fieldhouse, Peoria, Illinois, June 17, 18, and 19. Besides the many displays inside the fieldhouse, the rigs of various cable tool and rotary drill manufacturers set up on the outside of the building attracted many visitors.

The first afternoon's technical session included a talk, "Practical Geophysics for the Well Driller," by Carl A. Bays, Illinois State Geological Survey, and a symposium on the heat pump in which M. S. Oldacre, Utilities Research Commission, Chicago, M. M. Smith, Muncie Gear Works, Muncie, Indiana, and Clyde Freeman, Libby & Freeman, Orlando, Florida, took part. A buffet supper and entertainment was held that evening at the Pere Marquette Hotel.

C. W. Klassen, Illinois State Department Public Health, was chairman at a conference on uniform standards of Sanitary Well Construction that featured the morning session of the second day. In the afternoon, R. M. Leggette, Consulting Groundwater Geologist, New York City, spoke on "Ice and the Well Driller"; and J. R. Morrill, Lincoln

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Electric Co., delivered a paper on "Hard Surfacing by Arc Welding."

At the conference on Association conventions and Expositions, W. A. McEllhiney, Brookfield, Illinois, and R. R. Storm, Illinois State Geological Survey, were chosen chairman and secretary, respectively, of a temporary national well drillers association. Appointed to the board of directors were: O. E. Erdman, Alma, Washington; Clyde Freeman, Orlando, Florida; H. L. Parkhurst, Verona, New Jersey; Sylvan Ames, Lincoln, Iowa; Ed Smith, Kirkwood, Missouri, and A. E. Fawcett, Jr., Houston, Texas.

Officers Elected

Guest speaker at the annual banquet held in the evening at the Pere Marquette Hotel was Alfred P. Haake, Mayor, Park Ridge, Illinois. The final session of the meeting saw H. C. Angster, Executive Secretary, N. A. D. F. P. M., deliver an address on the pipe shortage and George B. Coffey, A. M. Byers Co., Chicago, talk on the wrought iron situation. A bit dressing demonstration by F. J. Spang and George Fish, Spang & Co., concluded the program.

The Illinois group re-elected W. A. McEllhiney to the presidency and chose: Henry Boysen, Jr., Libertyville, vice-president; J. T. Anderson, Morris, secretary; C. L. Johnson, Princeton, treasurer, and George Berns, Chebanse, and W. J. Neely, Batavia, as directors.

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New England Levels Show Marked Rise

HIGH ground-water levels during May point to favorable water supply prospects along the Atlantic coast for June, according to the monthly water report issued by the U. S. Geological Survey. In central New England ground-water levels rose to above normal heights, and in some wells were at record high levels for the season. At New Haven, Conn., levels in index observation wells were the highest in the nine-year period of record.

In New Mexico and California where the pumping draft is excessive, ground-water conditions still remain critical, although heavy precipitation has improved general water conditions in Northern California.

Small Turbine Pump Placed On Market

A NEW inexpensive turbine type shallow well water system designed as the Model LU-25 is now being introduced to the trade by the Pomona-Westco Division of Fairbanks, Morse & Co., according to company officials. The unit, selling at $75 f.o.b. St. Louis, Mo., has an all bronze pump housing with rub-

ber impeller, ¼ h.p. capacitor type motor, automatic pressure switch, copper tubing and fittings, 3½ gallon top-mounted pressure tank, a foot valve and an eight-foot electric cord and plug.

Weighing 53 pounds, the unit can be placed under a kitchen sink where it is out of the way and at the same time easily accessible. Complete information may be had by writing the Dealer Division of Fairbanks, Morse & Co., Chicago, Ill.

Shallow Well Pump Announced By Firm

A NEW pump unit has been announced by Jacuzzi Bros., Inc, designed to serve shallow wells to a depth of 40 feet. Called Speedi-Prime, the pump was manufactured to fit cases where the water level is sometimes too near the surface to justify a deep well pump installation and at the same time take care of the seasons where the water levels lower out of range for small shallow well units.

Now in production at Jacuzzi plants in Richmond, Calif., and St. Louis, Mo., the new pump is an adaptation of the Jacuzzi deep well injector pump. For general use, the injector is attached at the base of the pump rather than in the well. There is a choice of over-the-well or offset installation. A new six-page illustrated bulletin describing this new pump may be had free of charge by writing Jacuzzi Bros., Inc., Richmond, California.

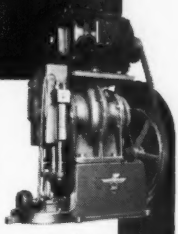
Drillers Hit Log

ACCORDING to newspaper reports, drillers unearthed part of a tree from a spot 1,020 feet under the ground in the Grande Ronde valley (Oregon). An undeniable grain of wood was found on a fragment.

Red Jacket

FOR PUMPS AND WATER SYSTEMS

A COMPLETE LINE



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FROM THE MAILBAG

This page is open to any of our readers having questions to ask relating to drilling, driving pipe, dressing bits, etc. All letters will be answered promptly by experienced drillers and engineers who are qualified to give intelligent advice on these subjects. We will publish as many letters of general interest as space will permit. Address: The Driller, South Milwaukee, Wis.

Sand In Well Water Gives Trouble

Dear Sir:

I would appreciate your help in dealing with a sand problem that has recently given me trouble. I encountered this sand after drilling 30 feet. After casing to that depth with six-inch pipe, I drove the pipe to a depth of 70 feet. Then I drilled ten feet further in clay and rock, leaving this portion open. Next I perforated the pipe at a distance of 55 to 57 feet, but the sand closed up the perforations, shutting off the water. So I pulled the six-inch pipe and reamed the hole to 10 inches, setting 8¼-inch pipe through sand and water when the reaming was finished. Then I put the six-inch casing (with about ten feet of perforations made as narrow as possible with an acetylene torch) inside the 8¼ casing. The space between the two casings was then filled in with ½-inch gravel, after which I pulled out the 8¼-inch pipe. The hole was filled up on the outside of the six-inch pipe with ½-inch gravel. By running water inside the six-inch pipe, sand was washed back from the pipe, allowing some six tons of gravel to be packed into the surrounding hole.

When we started pumping the well, the sand began coming up with the water and damaging the pump. After considerable pumping we have cut out one cylinder and numerous sets of leathers.

Can you give us any information on how to solve this problem?

L. F. B.

Oklahoma

When wells are made in sand or gravel it is usually necessary and desirable to place a screen at the bottom of the well to prevent the fine sand from rising in the pipe which will result in cutting out the pump leathers and in time plug the well. We understand this is what happened in your case.

Sometimes if the formation is coarse sand or gravel so that the particles making up the bed are of sufficient weight to prevent them from lifting in the pipe, good results are usually obtained by perforating the bottom of the drive pipe, the size of perforations depending on the amount of water to be used, also upon the thickness of the gravel stratum.

We see you have perforated the pipe and packed the gravel around the perforated area but the sand has persisted in raising in the pipe, indi-

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cating the perforations are too large or the gravel too coarse which permits the fine sand to lift through the gravel and get into the pipe through the perforations. Usually when wells are made in sand which is so light it will lift easily in the pipe and so fine that the rate of travel of the water through it is slow, the safest plan is to use a well screen. The theory of a screen is to provide a number of openings which are fine enough to prevent the sand particles from passing and are numerous enough to permit the required amount of water being drawn through without causing the rate of travel of the water in the sand to become so great that the sand will pack against the openings. Thus the size of screen to use depends upon the fineness of the sand.

We suggest you contact a manufacturer of screens, tell them of your problem and conditions and they will be in position to recommend the proper size and type screen for your purpose.

Casing Failure . . .

(Continued from page 7)

ought not to undertake the work if he cannot succeed, and he should know whether it will or not."

Court Interpretation

The Court's last above-quoted sentence should probably be interpreted merely as a restatement of the principle of law that, in the absence of express terms to the contrary, a driller will be held to a *professional* standard of skill and to an implied guaranty that he will do his work in a reasonably professional and workmanlike manner and that the well he has promised to drill will be fit for the purpose intended. An early issue of *THE DRILLER* will cite some of these cases.

The court's reasoning as to what was a proper basis for assessing dam-

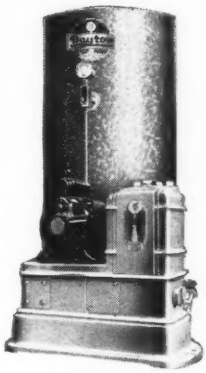
You sell

PLENTY

of running water when you sell

Dayton

Water Systems



Full capacity, in a wide range of models, is at your service when you sell DAYTON Water Systems. This means you can assure your customers PLENTY of running water for kitchen, bathroom, lawn, garden or for livestock. With *all* Dayton models you sell maximum service at minimum cost.

MAIL COUPON TODAY

THE DAYTON PUMP & MFG. CO.
DAYTON 1, OHIO

Please send me complete details on Dayton Water Systems, Water Softeners and Cellar Drainers.

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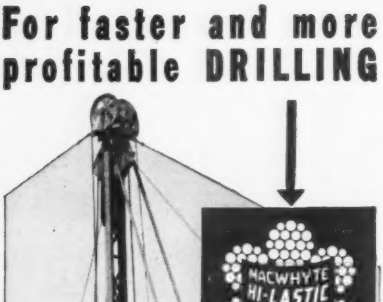
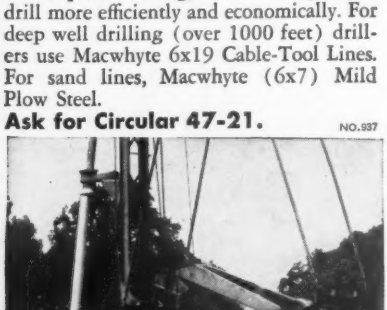
CITY _____ STATE _____

For faster and more profitable DRILLING



Macwhyte Hi-Lastic's "built-in" elasticity enables tools to strike harder, make hole faster. It keeps the bit turning on all types of formation . . . reduces tendency for holes to get out of round. Because Hi-Lastic speeds drilling, and lasts longer, you drill more efficiently and economically. For deep well drilling (over 1000 feet) drillers use Macwhyte 6x19 Cable-Tool Lines. For sand lines, Macwhyte (6x7) Mild Plow Steel.

Ask for Circular 47-21. NO.937



Get the correct line for your equipment from

MACWHYTE COMPANY

2939 Fourteenth Avenue, Kenosha, Wisconsin, or any authorized Macwhyte Distributor or Mill Depot

ages, assuming that defendant was at fault, is sounder:

"That"—$3,362—"is what the hole in the ground cost" the plaintiff "up to the time the defendant left it. It may not be worth anything, and may not have been, had it been completed to the depth of 700 feet. But, manifestly, if it was worthless as a water producing well at 683 feet, that is not evidence that at 700 feet it would still not produce the necessary amount of water. Indeed, as a venture it may be reasonably said that . . . it was worth up to that point what it had cost . . . . If it had been left so that it could have been utilized for drilling deeper, its worth for that purpose could have been enjoyed by the plaintiff and he probably would have been liable for the work up to that point, but it was not so left. It was as totally destroyed as if it had never been sunk at all. Therefore, we think the plaintiff was at the very least entitled to recover what he had expended for labor and material, plus the cost of the old hole, up to the time it was abandoned by the defendant."

A. L. H. Street

Profit-Loss . . .

(Continued from page 9)

usually glad to help you secure operating cost data.

There is one final thing that the profit and loss statement should show. It is not applicable to every drilling contractor, hence it is not always used. This final factor is *other business income.*

What is *other business income?* It might be any of several things. Your firm may own property in the company name rather than in its owner's, and this property might produce income in the form of rentals. This is one example of what accountants term other business income.

Again, your company might hold some United States government bonds, or the bonds of other governmental bodies, or even private company bonds. The dividends from this stock and the interest paid on the bonds is other business income.

The profit and loss statement classification of other business income embraces any source of money other than the regular source for which your business was set up. Any funds it gathers in other ways is considered other business income on the profit and loss statement.

Get True Picture

There is a reason why bookkeepers and accountants draw this fine line, insisting upon separate marking of other incomes rather than lumping them in with the direct receipts. If the profit and loss statement is to perform efficiently one of its major jobs—telling you how your business is going, where it is going, and why—then the lumping of unrelated money in with the direct receipt figures tends to give a false picture of the trend of the business.

In a well set up and well planned profit and loss statement, you have a very accurate and very sensitive indicator of the health of your company. When things are wacky, it tells you by flashing a red warning light as noticeable as the fever mark on the thermometer. It's a good ego builder when you are doing well, however; it reaches out to pat you on the back and say, "Your business is in fine shape now, Mr. Driller."

Buy Savings Bonds

IN cooperation with the U. S. Savings Bonds Division of the Treasury Department, THE DRILLER urges its readers to prepare for the future by investing in Savings Bonds.

Buy Now!

Pump Handle Pete Says:

Jensens often pull Drillers out of a Hole

By knowing just a few facts about Jensens — operate on gas or electric power, simple design, rugged construction, cost about 7c a day to operate — many drillers are able to sell wells to prospects who have gone sour on other pumping methods.

It's easy to get these facts on Jensens. Address a card or a letter to Coffeyville. By return mail you'll receive a free illustrated folder giving facts on Jensens that will help you sell more wells. Write today.

JENSEN
BROTHERS MFG. CO.
COFFEYVILLE, KANSAS, U. S. A.
EXPORT OFFICE, 50 Church St.
New York City

IT'S NEW—IT'S DIFFERENT
IT'S DISTINCTIVE

McDONALD MISSISSIPPI DELUGE

HYDRO JET PUMP

Shallow well installation

The most advanced hydro-jet pump ever developed. Completely interchangeable for deep and shallow well service. Simply change one-piece shallow well jet fitting to convert to deep well unit, or vice versa. It's new. It's different. It's distinctive. Unmatched in features such as interchangeability of motors from ¼ to 1 HP., horizontal construction for installation at well or offset, longer lasting rotary seal, and many others.

A NAME YOUR CUSTOMERS KNOW FOR DEPENDABILITY!

Now, with the new Mississippi Deluge Jet pump, plus the great McDonald reciprocating units, you have the "top" line in the field. Write for facts.

NOW IN OUR 92nd YEAR

A. Y. McDONALD MFG. CO.
DUBUQUE, IOWA
Pumps Plumbers Brass Oil Equipment

Sales Personnel Changes Made

ANNOUNCEMENT of sales personnel changes in the Peerless Pump Division, Food Machinery Corporation, was made by F. R. Fairman, Jr., FMC Vice-President and Peerless Divisional Manager.

E. E. Bauer has been appointed manager of Peerless' Central sales district located at 4554 No. Broadway, Chicago, Illinois. He was formerly centrifugal pump sectional sales manager for the Peerless division. As district manager, Bauer will supervise the sales of Peerless horizontal and vertical lines and other pumps of the company's manufacture.

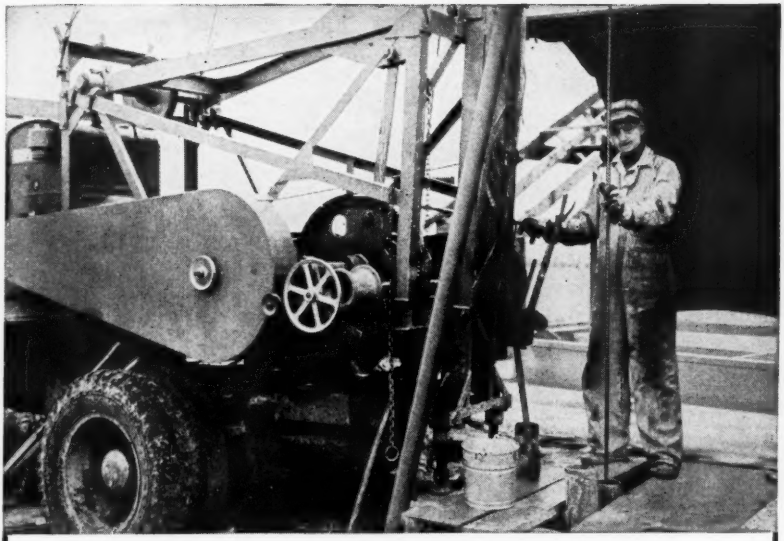
Frank W. McCann, who has been named to the position formerly held by Bauer, will be located at the Quincy, Illinois, Peerless plant.

Pump Company Reports Changes

THE recent appointment of Louis Wozar as assistant to Frank M. Tait, President and General Manager of the Dayton Pump & Mfg. Co., Dayton, Ohio, was announced by the company.

Before assuming his new position, Wozar spent five years with United Aircraft Products, Inc., of Dayton, where he was general superintendent. Prior to that he had been general works manager of Chambron-Champlain, Inc., of New York City.

Also announced was the appointment of Jack N. Riggs, who has been with the company for many years, as purchasing agent. George W. Eichoff continues as general sales manager, A. R. Hall as assistant sales manager, and Harry Rothermel as advertising manager.



For Better Drilling Performance—

WISSCOLASTIC

Water Well Drill Lines

"WISSCOLASTIC" water well drill lines are constructed to provide a far greater degree of elasticity than will be found in most ropes of standard design. This permits your rig to operate at its highest efficiency, develops fast, smooth drilling.

"WISSCOLASTIC" drill lines don't have to be "babied." They are pre-broken in at our plant to insure good drilling quality from the moment the line is put on the rig.

Write today for complete information. Address your request to Wire Rope Sales Office, Wickwire Spencer Steel Division of C.F.&I., Palmer, Mass.

WICKWIRE ROPE

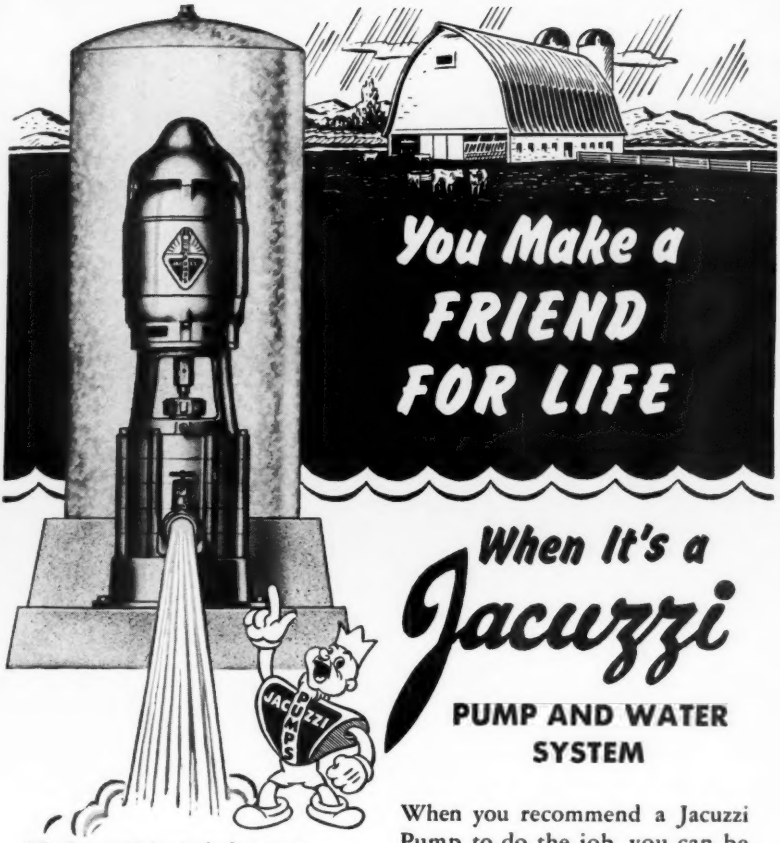
A Product of Wickwire Spencer Steel Division of the Colorado Fuel & Iron Corporation

Wire Rope Sales Office & Plant—Palmer, Mass · *General Office*—500 Fifth Ave., New York 18, N.Y.
Sales Offices—Abilene (Tex.) · Boston · Buffalo · Chattanooga · Chicago · Denver
Detroit · Emlenton (Pa.) · Ft. Worth · Houston · New York · Phoenix · Philadelphia · Salt Lake City · Tulsa
Pacific Coast Subsidiary—The California Wire Cloth Corp., Oakland 6, Cal.

"City Of Windmills" Receives Water

CITIZENS of Sterling City, Texas, can thank their fellow townsman, C. W. Smith, for literally creating a new city resource when he recently drilled a well for the city —and struck it rich. No, not oil. Soft water and plenty of it. The 105-foot well that the Texan put down pumped an average of 130 gallons of water per minute when tested. In Smith's territory it is rare to find water that is not somewhat mineralized and the usual production of a well runs around 12 to 20 gallons per minute, so the community's elation at the "strike" is evident. It is thought by many persons that this new well will go a long way toward solving the unincorporated town's needs should the citizens decide to incorporate.

A veteran water well driller of some 20 years' experience, Smith has been largely responsible for putting down wells for a good many homes in the city and installing windmills. According to Smith, Sterling City is known as the "City of Windmills" because of the fact at least one out of every three homes sports a windmill. The above picture shows Smith standing at the city well after the pump installation had been completed. Can you blame him for feeling just a little bit proud?



When It's a Jacuzzi PUMP AND WATER SYSTEM

The Jacuzzi Line includes pumps for domestic, industrial, irrigation use... electric motor, gasoline engine or belt driven... a pump for every purse and purpose. Write us for further information and name of nearest Jacuzzi distributor.

JACUZZI BROS. INC.
Pumps for Deep and Shallow Wells
RICHMOND, CALIFORNIA
PLANT ALSO AT ST. LOUIS, MO.

When you recommend a Jacuzzi Pump to do the job, you can be sure of your customer's lasting appreciation. No moving part below ground and only one above ground—hence upkeep and service are negligible. Efficient, economical, dependable, Jacuzzi Pumps are easy to sell and keep *you* sold. One of the most complete lines in America... backed by national advertising... an ideal set-up for dealers.

ORIGINATORS OF INJECTOR TYPE PUMPS

St. Paul Drillers Buy Hemphill Co.

OF interest to drillers in the Northwest is the announcement by R. K. Bergerson and Thomas B. Caswell that they have purchased the drilling business, including buildings and equipment, formerly belonging to L. J. Hemphill Well and Pump Company, Minneapolis, Minnesota. Both Bergerson and Caswell were formerly associated with the McCarthy Well Company of St. Paul.

Rolling Rigs . . .

(Continued from page 6)

The boys have also picked up the old trick of painting dots on the rim of the bull reel to indicate the footage being put down. The dots are placed at the spokes beginning with one dot and running a dot to each spoke until the full drum circumference is indicated. This has proved to be a good visual indicator of the drilling progress being made, particularly when they have to drill in solid limestone which they so frequently encounter. One revolution of the wheel informs them that they have drilled about three feet of hole.

Since beginning operations, the boys have drilled more than 100 wells, basing their footage charges upon the type of formation in which the well is drilled. Their charge also includes the cost of furnishing the casing.

Drilling In Limestone

When interviewed by the writer, their newest Bucyrus-Erie rig was on a job near Mt. Sidney, Virginia, while their other rig was busy drilling a shallow oil well near Parkersburg, West Virginia, under the direction of the third co-owner, F. S. Hawthorne. R. N. Baker and R. D. McCollum were handling the Mt. Sidney job which called for the extension of an old well down to a better water supplying strata. The boys were "worrying down" the 5⅝-inch hole in solid limestone and were at a depth of about 50 feet when the pictures accompanying the story were taken. The well was for a garage owner who wanted 1000 gallons of water a day to use in car washing and radiator flushing. From previous drilling experience in this locality, the boys expected to hit water in good quantities between 50 to 200 feet below the earth's surface.

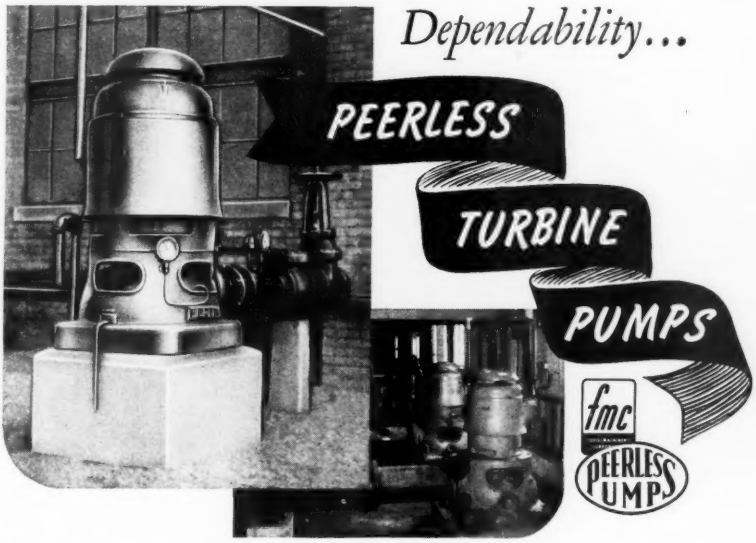
Basing their calculations on a standard 8-hour working day, the boys figured that they were putting down 12 to 15 feet per day in the hard limestone. Although they were getting ten feet of footage on one sharpening of the bit, this heartening record was not achieved without pre-

Best known–easiest to sell

MYERS *Ejecto* and Plunger Type Water Systems for every need

THE F. E. MYERS & BRO. CO.
Dept M-38
Ashland, Ohio

The Standard of Deep Well Turbine Pump Dependability...



Flexibility to Meet Your Requirements

FOR WATER SUPPLY, PROCESSING, RECIRCULATION, FIRE PROTECTION

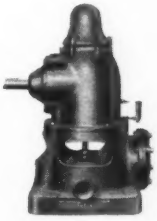
CAPACITIES: *15 to 30,000 GPM* **LIFTS:** *To 1000 ft.* **HP RANGE:** *1 to 1000 hp*

Look to Peerless for dependable turbine pumping performance, economy of operation and top flight efficiency. Peerless turbine pumps are extremely simple in construction, flexible in operation, compact in installation and are easily adapted to handle practically all types of pumping operations. They embody all modern refinements of design and construction. They are available in deep well types, close-coupled types for short or medium settings and Underwriters' approved types for reliable fire protection service. Plan with Peerless for unbiased vertical turbine pump recommendations.

CHOICE OF DRIVES – OIL OR WATER LUBRICATION

All forms of power drives or adaptations in a full range of sizes and power to meet your requirements. These include Motrubo-electric hollow shaft drive, Gearturbo-right angle gear drive, Veeturbo (V-belt) and Belturbo (flat-belt) drives. (Right angle gear drive illustrated.)

For most services... in all industries



Request descriptive Bulletin B-141-1

PEERLESS PUMP DIVISION

FOOD MACHINERY CORPORATION

FACTORIES: LOS ANGELES 31, CALIF.; INDIANAPOLIS, IND.

District Offices: New York 5, 37 Wall Street; Chicago 40, 4554 No. Broadway; Atlanta Office: Rutland Building, Decatur, Georgia; Dallas 1, Texas; Fresno, California; Los Angeles 31, California

vious difficulties. During the early months after the formation of the company, they had considerable trouble with their bits in limestone and other hard rock formations because the bits had a tendency to crack. This bit trouble and consequent slowup of work started them to studying the techniques of bit dressing until they evolved their present dressing methods, methods which give them better footage and prevent trouble. The boys base their present bit dressing methods on information secured from files on bit dressing, heat treatment, plus talks with old time blacksmiths.

Use Field Forge

Their field forge is made with a deep firepot which is hooded to provide a uniform heat. In cold weather, the boys first warm their bits by the side of the fire before heating them. They follow the accepted method of heating bits in the field very closely, although they make use of a small horseshoe magnet to determine the heat of the bit before quenching. The color method is used while heating the bits for shaping. This careful study has paid off for the company by eliminating bit cracking and by increasing at least 50% the number of feet drilled per sharpening.

Encounter Trouble

Some of the limestone formations in Virginia and West Virginia provide the boys with their share of well drilling troubles. In these localities the limestone formation is honeycombed with fissures and cavities, which will often send the drill bit off in the direction of Washington instead of straight down. When this happens, the boys throw tree limbs and tree trunks into the hole to work into the hole bottom and prevent sloping. Because of the location of most of their jobs, the boys have no difficulty in locating this type of material.

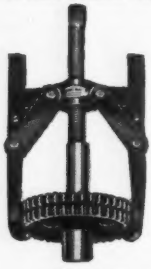
Keep Hole Plumb

Should the tools drop into a cavity, the boys pull up the tools and drive a length of casing down far enough to act as a guide for the stem when they start drilling. When the cavity bottom slopes at an angle, the boys string on a freshly sharpened bit to aid in drilling the hole plumb. A sharpened bit establishes a foothold much more quickly than a bit that has had its cutting edges rounded by wear.

At present, the Aqua Drilling Co. is operating in the states of Virginia and West Virginia—but they expect to enlarge their territory as soon as new rigs are added to their fleet. They figure that the mobility of their truck-mounted rigs will make these operations possible and profitable.

SURPLUS STOCK SALE!

47 Brand New
Gear and Wheel Pullers



Popular Size
Model No. 1004.

The harder the pull, the tighter the arms hug the work. Made of heavy one-piece forged steel yoke. Heat treated forged steel arms and straps. Will take gears, wheels, etc., up to 18" in diameter.

Diameter .....18"
Reach .....15½"
Diameter, Screw .....1¼"
Length, Screw .....16"
Hole adjustment .....3 hole
Weight .....40 lbs.

Bargain Price $22 ea. F.O.B. South Milwaukee

Bucyrus-Erie Co.
South Milwaukee, Wis.

SELL DEMING and you sell them ALL!

Farms, homes, factories, commercial buildings are YOUR markets for Deming Pumps and Water Systems, Mr. Well Driller. The COMPLETE Deming line makes it possible for you to *sell them all!* If you have never before had the opportunity to find out WHY Deming offers you MORE opportunities to make a success of your business, we will send you complete details without obligating you in any way. Fill in the form below, cut out and mail to us NOW!

THE DEMING COMPANY
512 Broadway • Salem, Ohio

Please send FREE information about the Deming line of pumps and water systems.

MY NAME .....

COMPANY .....

ADDRESS .....

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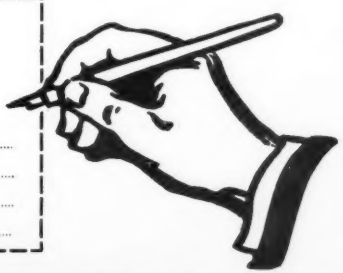


DEMING

THE COMPLETE LINE

PUMPS AND WATER SYSTEMS

WIT BITS

A bank president was making a tour of his large bank when he noticed a new employee dexterously counting out large sums of money for customers. Impressed with the newcomer's manner, he walked over to the young man and asked: "Where did you get your financial training, young man?"

"Yale," the young man answered.

Being a staunch advocate of higher learning, the president beamed and said: "Good. Very good. And what is your name?"

"Yackson."

Patient to psychiatrist: "Doctor, I want you to split my personality for me."

"You're all mixed up," said the psychiatrist. "We don't split personalities, we weld them together."

"But I want mine split," insisted the patient. "I'm lonesome."

"Me slept with daddy last night," said the small child to the kindergarten teacher who believed in correct grammar. With emphasis the teacher replied, "*I* slept with daddy last night."

"Well, then," said the child, "you must have come in after I went to sleep."

A lady, bragging about her new house with all the superlatives in existence, finally ended her oration with "and the bathroom is simply out of this world."

Bored Listener: "Makes it slightly inconvenient, doesn't it?"

Aggressive wife: "And don't sit there making fists at me in your pockets, either."

"Joe comes from a very poor family."

"Why, they sent him to college, didn't they?"

"Sure. That's what made them poor."

Little Johnny was sad and dejected when he returned home after his first day at school. "I ain't going tomorrow," he told his mother.

"And why not?" she asked.

"Well," he replied, "There's no use. I can't read and I can't write and they won't let me talk."

A merchant took out a fire insurance policy and the same day his store and contents burned to the ground. The insurance company suspected fraud, but it couldn't prove anything. It had to be content with the following letter:

"Dear Sir: You took out an insurance policy at 10 a.m., and your fire did not break out until 3:30 p.m. Will you kindly explain the delay?"

The little tot was sitting demurely on the couch, watching her mother smoking a cigarette. Her little nose was wrinkled and in her pale blue eyes was an expression of child disillusionment. Finally, unable to stand it any longer, she blurted out in a quavering voice, "Mother, when in the devil are you going to learn to inhale?"

Conceited Ham Actor: "And when I became famous, they hung a star on the door of the dressing room in which I was born."

Bored Listener: "Are you sure it wasn't a half-moon?"

All advertising in this section is payable in advance. Enclose your check or money order with copy. Rate: 30c per line. Minimum charge $1.20. No discounts; no commissions. Count your own copy to avoid delay. The average line contains 28 characters (20 characters if all capital letters are used). Count spaces and punctuation as one character each. Allow 10 characters for box number if blind advertisement is desired. Closing date—10th of preceding month. Example — January issue closes December 10th. Be sure to address separate inquiries to each advertiser by using the correct box numbers. Mail Box inquiries care of THE DRILLER, South Milwaukee, Wis.

DRILLS FOR SALE

Armstrong 50-W. Good condition. Original tractor mounting. 6-cyl. Cont. motor, 900' lines. Some tools. Working everyday about 50 miles north of Bakersfield. $3250. Ralph Burke, P. O. Box 506, Terra Bella, Calif.

"SHUR-HIT" drilling machine mounted on dual wheel four wheel trailer. Less than 100 hours of drilling. Without cable or tools — $1700. AAA Drilling Co., 3911 Joy Road, Detroit 6, Mich. TY 45600.

No. 240 Speed Star drilling machine. New, July 1947. Fully equipped; starter, clutch, slow speed cat-head, and other things. Mounted on Chev. 1½ ton truck. Large trailer, material, good drilling location goes with this if wanted. All equipment in good shape. Must sell due to ill health. Bob Evans, Box 422, Sidney, Montana.

DRILLS FOR SALE

One brand new Bucyrus-Erie 22-W, factory trailer mounted.

One late model Star 240 in good condition.

Two latest Models Burton Shurhits.

Also, almost all sizes new and used pipe in limited quantities from 3¼" to 10", both black and galvanized.

Drilling and fishing tools, orders taken. Gas, Oil & Water Supply Co., 13185 Ohio Ave., Detroit 4, Mich. Phone Webster 35545.

Armstrong 14 semi-mounted on Chev. truck, 350 ft., ⅝" & ¾" cable, new 36 ft. tower. Bucyrus shock absorber. 6 cyl. engine. Machine and truck, $500. Complete string of tools. 1⅝ x 2½-8 joints, extra. Also 1 — 3¾, 44" stroke all-brass ball valve open top cylinder. Evan N. Newman, Box 176, Toulan, Ill. Phone 78.

Practically new Con-Sol well drill. For drilling 4" wells. Used only 20 hours' drilling time. Machine has been rebuilt so operator stands in front of rig instead of rear. Power — two electric motors, ¾ H.P., to operate machine, tools and ⅓ H.P., to hoist tools out of well. Winch mounted in front of machine with hand brake so operator can feed cable as needed. Mounted on two wheel trailer which can be towed behind a car or truck. 100' ¾" cable; 4" drill tools and 3" bailer. Will sell complete for $385. Jack King, Wautoma, Wis.

Bucyrus-Erie 21-W drill purchased new in 1947 mounted on a 1941 Ford 1½ ton truck. Complete string of tools for 5⅝" hole, 500' of new ⅝" drill line, 400' of sand line, 5 bits, horn socket, combination socket, center spear, latch jack, and tool guide. Drill, truck, and tools in A-1 condition. Price $4250. Max Linn, Black Rock, Ark.

DRILLS FOR SALE

1947 Model 16 Ideco spudder, machine has 36 foot telescopic derrick with pipe braces. 2 nigger heads, 1 calf reel, I stem guide. Mounted on 1940 1½ ton International truck, 2 speed axle. No tools or cables. Price $3900. Box 245

Bucyrus-Erie 24-W spudder mounted on CS-40 International truck. Rig and truck in A-1 mechanical condition. Price $4500 FOB Tucson. Phone 6340-R3, R. H. Wininger, 2649 Oracle Road, Tucson, Arizona.

240 Speed Star. Two years old. New paint, new bearings, motor overhauled. Will sell or trade for Bucyrus-Erie 22-W, 71 Star or a heavier machine. F. B. Rogers, Jessup, Md.

One Fairbanks-Morse new 4 cyl. reversible marine diesel engine with clutch and all accessories complete. 120 hp at 450 rpm. Sell for about 50% off list price. Dealers protected. H. T. Holloway, 529 Majorca Ave., Coral Gables, Florida.

Cyclone No. 0 with 6 H.P., gasoline engine, mounted on 1931 Dodge truck. Machine in fair condition, working every day. New wood frame. Derrick 23' high. Ideal for 2" and 3" wells up to 200'. Price including truck $500. Contact Leland Crawford, New Troy, Mich.

One Bucyrus-Erie 26-T drill on caterpillar mounting with rubber sheaves, spooling device, box mast, tool guide in A-1 condition. Price $4500 f.o.b. Madera, California. Write The Driller. Box 239

(continued on page 30)

DRILLS FOR SALE

(continued from page 29)

Failing slim-hole rotary rig, complete ready to go to work. Mtd. '42 GMC 3 axle truck, excellent thru-out. Bill Myers, 521 Oak, San Bruno, Calif.

BUSINESS FOR SALE

Pump and well drilling business in fastest growing region in the country, where wells and pumps are a necessity. Distributors for 2 nationally known pumps. Sales over $60,000 per year. Own land and building. Total cost everything — land, building, equipment and inventory — $25,000. Contact E. A. Engels, North West Pump & Supply Co., 1040 N. W. 54th St., Miami, Fla.

Will trade 1947 semi-trailer mounted Keystone 50 for Bucyrus-Erie 22-W. Located in Wisconsin. Box 243

Bucyrus-Erie 33-W mounted on 1½ ton Chevrolet truck. Drill in good condition, recently overhauled. Can be seen working. J. S. Holman, Linden, Wis.

Bucyrus-Erie 21-W mounted on Ford V-8 truck. 31½′ derrick. Machine and truck in good condition. Cables included. No tools. Available immediately. Box 240

DRILLS FOR SALE

Sullivan 22-HD core drill. New, has drilled less than 1500′. $11,000 inventory. Will sell, or trade for 24-L or 22-W. Box 242

MISC. FOR SALE

1 — New 71 Star spudding gear and pinion key ways for loose cranks, $50. 1 set malleable Fairs 4″ elevators, $20. 1 set of 3″ mal. Fairs elevators with 2½″ liners, $20. 1—8″ ring and slips $100. 1 forged ring with 6⅝—6¼—6—5 3/16 slips, $150. 1—EB mounting for 24L B. Erie spudder 1947, 15% less than new price. 1 new casing strut for 48″ derrick, 15% less than new price. 1—3 knife 6″ pipe cutter, $10. 1 string of 5″ tools 12′ 3½″ stem, 2 bits, 1 rope socket, 2x3x8 joints, $50. 1—8″ screw in drive head, $20. 1 stem, nearly new 14′ 4″ 2x3x7 API —2—5 in. bits, 1 swivel socket, 1 set used jars, 2 wrenches, 1 light track and horn, no jack, 2 wrenches, 20′ bailer for 5″ hole, 1—8″ bit, 1—8″ bailer, $190. 1—3000′ ¾″ 6x19 mild plow drilling line, 3000′ ⅝″ 6x9 mild plow sandline used to drill a 2400′ well 150′ deeper. Will sell both for $250. 1—10″ short bit 3½ API joint, $10. 1 rope socket woodpecker 3½ API $10. Box 246

HELP WANTED

Year-round work, high wages for high-grade, sober, steady driller. Stewart Bros., Schenectady, N. Y. Night phone 6-1319.

Good driller to take charge of Bucyrus-Erie 22-W machine. Must be capable and understand setting screens. Good salary and commission. L. L. Oberlin, 265 Crystal Lake Drive, Pontiac, Mich.

Reliable experienced rotary drillers capable run job and assume responsibility for water well drilling in Republic of Colombia. Year around work, excellent salary and bonus. References required. Address Box 215, Hollywood Station, Memphis, Tennessee.

POSITIONS WANTED

Water well driller with 35 years experience desires steady employment with reliable drilling company. Wisconsin preferred. Sober, industrious, can furnish excellent references. Box 244

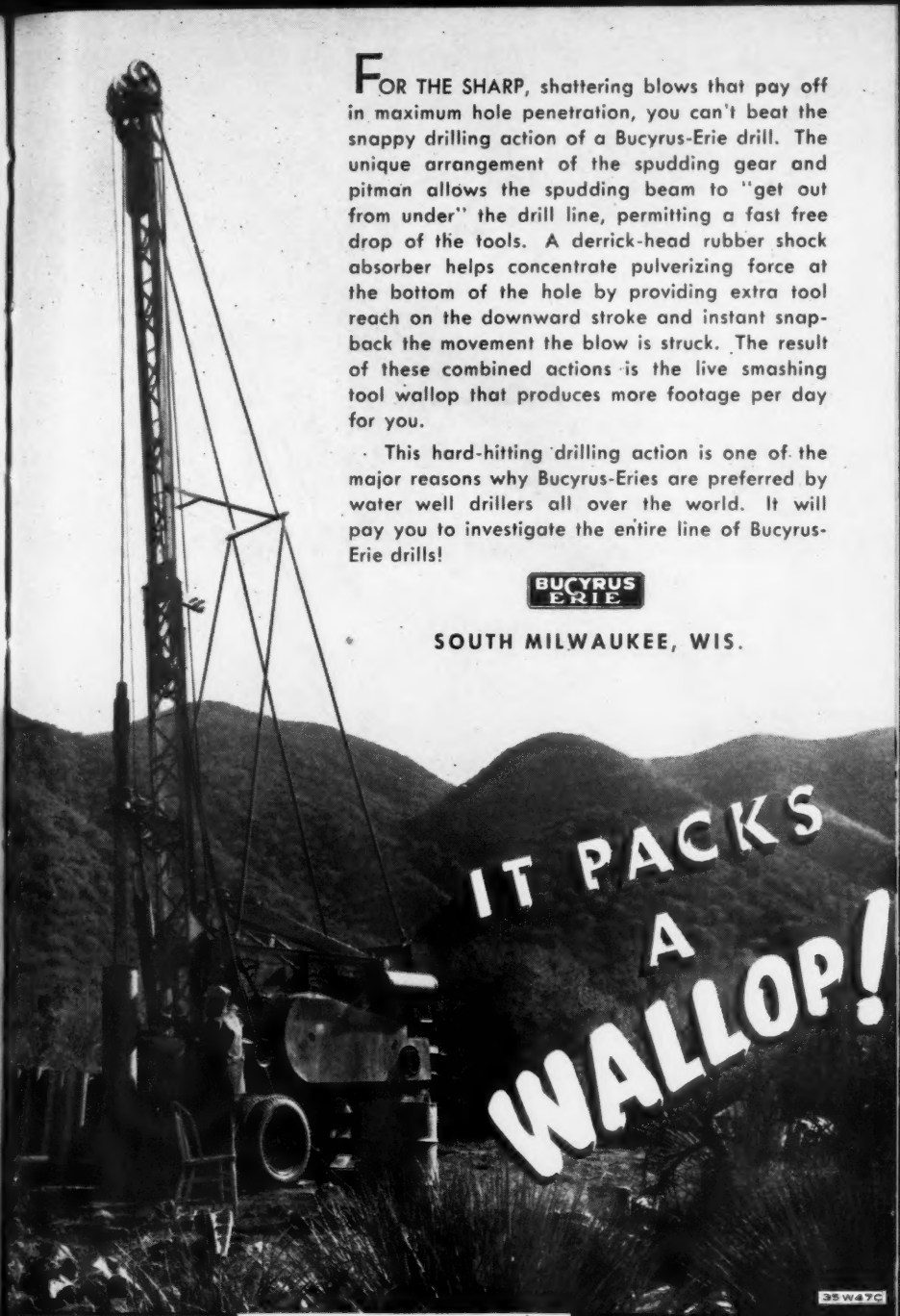
Animated Movie To Illustrate Pump Workings

"SHOOTING" on a 16mm color motion picture of their Double Case Pumps was recently started by the Pump Division of the Byron Jackson Co., according to a press release. The film will demonstrate the design of the pump and assembly operations. By the use of animation, it will be possible to show the actual operation of the pump. Upon completion of the film, a schedule of showings will be worked out by the Pump Division through various regional sales offices of the Byron Jackson Co.

Lynn Sawyer, vice-president and general sales manager, Val Lobanoff, consulting engineer, and advertising manager Bill Smick, all of the company, are collaborating with the film director in the making of the film.

Gas What Happened

NEWS wires report that Norman Yarchkow of Britton village, 25 miles west of Monroe, Michigan, hired Olen Marshall of Monroe to drill a well for him. When gas was hit at 165 feet, Yarchkow settled for that. By capping the flow which ranges from 20 to 30 pounds pressure, Yarchkow now has sufficient supply to heat his home and may have a little extra to sell.



FOR THE SHARP, shattering blows that pay off in maximum hole penetration, you can't beat the snappy drilling action of a Bucyrus-Erie drill. The unique arrangement of the spudding gear and pitman allows the spudding beam to "get out from under" the drill line, permitting a fast free drop of the tools. A derrick-head rubber shock absorber helps concentrate pulverizing force at the bottom of the hole by providing extra tool reach on the downward stroke and instant snap-back the movement the blow is struck. The result of these combined actions is the live smashing tool wallop that produces more footage per day for you.

This hard-hitting drilling action is one of the major reasons why Bucyrus-Eries are preferred by water well drillers all over the world. It will pay you to investigate the entire line of Bucyrus-Erie drills!

BUCYRUS ERIE

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RE MARKETS WITH BUCYRUS-ERIES
RE PROFITS

Industrial wells Residential wells
Farm wells Municipal wells

August, 1948

Rapid Rolling Rigs Spark Young Firm 4
Formed after the war by three enterprising young veterans from widely-separated states, the Aqua Drilling Company of Parkersburg, West Virginia, is making modern streamline methods of drilling pay off in success.

The Driller and The Law 7
Failure to Anchor Casing Brings Suit.

Profit-Loss Statement Proves Aid To Drillers 8
Because many drilling contractors are not too familiar with the use of the profit and loss statement as a business aid, this article is presented to provide an easy-to-grasp description of the advantages of such a statement.

Editorial Page 10
Pump System Makers Need More Steel Says Official.

News of the Month 12
Association reports for Washington, Empire State, North Carolina, Florida, and Illinois; news of the industry.

From The Mailbag 16
Sand In Well Water Gives Trouble.

Wit Bits 28

Bargain Counter 29

ADVERTISERS IN THIS ISSUE

Bucyrus-Erie Co. 2, 26, 31
Colorado Fuel & Iron Corp., Wickwire Spencer Steel Div. 21
A. D. Cook, Inc....13
Dayton Pump & Mfg. Co. 17
Deming Co. 27
Driller Records 14
Fitler Co., E. H.....16
Ingersoll-Rand 3
Jacuzzi Bros. Inc...23
Jensen Bros, Mfg...19
A. Y. McDonald Mfg. Co. 20
Macwhyte Co. 18
F. E. Myers & Bros..24
Peerless Pump Div...25
Red Jacket Mfg. Co. 15
Sta-Rite Products, Inc. 11

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